

METHOD AND STRUCTURE FOR SCALABLE, LOW-COST POLYSILICON CAPACITOR IN A PLANAR DRAM

Abstract of the Disclosure

Capacitor structures that have increased capacitance without compromising cell area are provided as well as methods for fabricating the same. A first capacitor structure includes insulating material present in holes that are formed in a semiconductor substrate, where the insulating material is thicker on the bottom wall of each capacitor hole as compared to the sidewalls of each hole. In another capacitor structure, deep capacitor holes are provided that have an isolation implant region present beneath each hole.

Figures